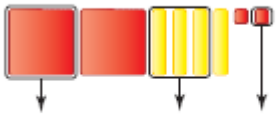
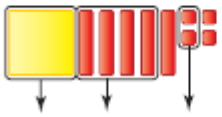
**4.** Write the subtraction sentence that these algebra tiles represent.

a) 

b) 

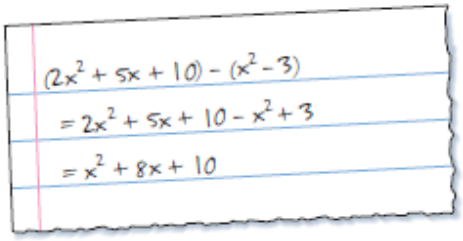
**7.** Use algebra tiles to model each difference of trinomials. Record your answer symbolically.

a) $(3s^2 + 2s + 4) - (2s^2 + s + 1)$
b) $(3s^2 - 2s + 4) - (2s^2 - s + 1)$
c) $(3s^2 - 2s - 4) - (-2s^2 + s - 1)$
d) $(-3s^2 + 2s - 4) - (2s^2 - s - 1)$

**8.** Use a personal strategy to subtract. Check your answers by adding.

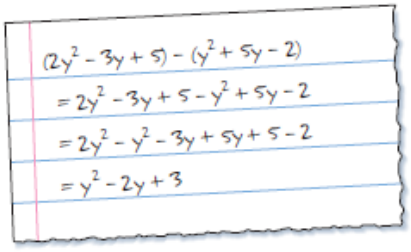
a) $(3x + 7) - (-2x - 2)$
b) $(b^2 + 4b) - (-3b^2 + 7b)$
c) $(-3x + 5) - (4x + 3)$
d) $(4 - 5p) - (-7p + 3)$
e) $(6x^2 + 7x + 9) - (4x^2 + 3x + 1)$
f) $(12m^2 - 4m + 7) - (8m^2 + 3m - 3)$
g) $(-4x^2 - 3x - 11) - (x^2 - 4x - 15)$
h) $(1 - 3r + r^2) - (4r + 5 - 3r^2)$

**10.** A student subtracted $(2x^2 + 5x + 10) - (x^2 - 3)$ like this:




a) Use substitution to show that the answer is incorrect.
b) Identify the errors and correct them.

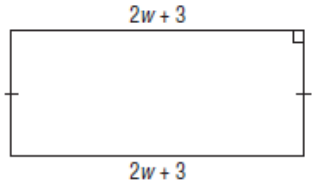
**12.** A student subtracted like this:



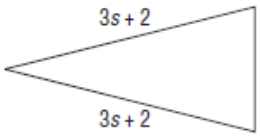

a) Explain why the solution is incorrect.
b) What is the correct answer? Show your work.
c) How could you check that your answer is correct?
d) What could the student do to avoid making the same mistakes in the future?

**13.** The perimeter of each polygon is given. Determine each unknown length.

a) $6w + 14$

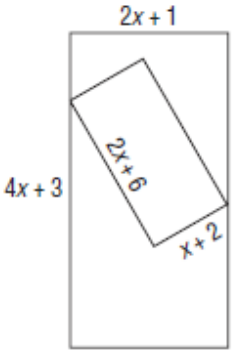



b) $7s + 7$




c) $10p + 8$

**17.** The diagram shows one rectangle inside another rectangle. What is the difference in the perimeters of the rectangles?




**18.** One polynomial is subtracted from another. The difference is $-4x^2 + 2x - 5$. Write two polynomials that have this difference. How many different pairs of polynomials can you find? Explain.